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## **MEMORANDUM**

**TO:** Patrick Goddard, Director of Facilities, Town of Lexington

Paul B. Ash, Ph.D., Superintendent, Lexington Public Schools, Estabrook

**Advisory Committee** 

**FROM:** Matt A. Fragala, M.S., C.I.H., Senior Scientist

**DATE:** September 6, 2011

RE: Surface Samples Collected on August 15, 2011, Estabrook Elementary School,

Lexington, Massachusetts (EH&E 17892)

This memorandum provides results of the most recent surface sampling at Estabrook Elementary School (the School). The objective of the surface sampling was the continued evaluation of the effectiveness of the encapsulant applied to polychlorinated biphenyl (PCB)-containing caulk on windows and wall panels. This was accomplished by measuring concentrations of PCBs in surface dust inside the School and on top of the encapsulated surfaces. Results were evaluated according to the criteria outlined in the June 9, 2011, Operations and Maintenance (O&M) Plan. According to the O&M Plan, surface samples must meet the following criteria:

- Potential exposure to PCBs in surface dust shall be controlled to as low as reasonably achievable, and in all cases surface dust PCB concentrations shall comply with the criteria set forth by the U.S. Environmental Protection Agency (EPA) of 1 microgram per 100 square centimeters (μg/100 cm²).
- Potential exposure to PCBs on encapsulated surfaces shall be controlled to as low as reasonably achievable, and in all cases comply with criterion set forth by the EPA of 1 μg/100 cm<sup>2</sup>.

Sample results provided in Table 1 indicate that PCBs were not detected above the detection limit of 1  $\mu$ g/100 cm<sup>2</sup> in any of the 20 locations sampled on August 15, 2011 (PCBs were also not detected above the detection limit of 1  $\mu$ g/100 cm<sup>2</sup> in any of the four quality assurance

samples collected.). All sample results meet the surface criteria established by EPA as outlined in the O&M Plan. These results indicate that encapsulation of the interior and exterior surfaces remain effective. Sample locations are provided in the attached drawing.

**Table 1** Wipe Sample Results for Polychlorinated Biphenyls from Estabrook School, 117 Grove Street, Lexington, Massachusetts, August 15, 2011

Sample ID	Description	Aroclor 1248 <sup>1,2</sup> (μg/100cm <sup>2</sup> )
Sample 1D	Surface Dust	(μg/Toochi )
126576	Nurse's Office, file cabinet	BRL <1
126577	Main Office, front desk	BRL <1
126578	Room 21B, top of room divider	BRL <1
126579	Room 21B, top of room divider (duplicate of 126578)	BRL <1
126580		BRL <1
126581	Room 13, student desktop Field blank	BRL <1
126582	1.10.0 0.0	BRL <1
	Principal's Office, desktop	
126583	Room 24, student desktop	BRL <1
126584	Room 5, work table	BRL <1
126585	Room 1, work table	BRL <1
126586	Room 39C, student desktop	BRL <1
126587	Room 4, work table	BRL <1
Encapsulated Surfaces		
126588	Room 4, third window from left (outdoors)	BRL <1
126589	Room 24, window first on left (outdoors)	BRL <1
126590	Room 39C, second window from right (outdoors)	BRL <1
126591	Room 1, window right of unit ventilator	BRL <1
126592	Room 5, window left of unit ventilator	BRL <1
126593	Room 13, window first on right	BRL <1
126594	Room 21B, window first on left	BRL <1
126595	Room 21B, window first on left (duplicate of 126594)	BRL <1
126596	Room 20, window first on right	BRL <1
126597	Room 3, window right of unit ventilator	BRL <1
126598	Room 19, window first on left	BRL <1
126599	Field blank	BRL <1

μg/100cm<sup>2</sup> microgram per 100 square centimeters

BRL below reporting limit < less than

If you have any questions regarding the information within this memorandum, please do not hesitate to contact us at 1-800-TALK EHE (1-800-825-5343).

Attachment: Surface Wipe Sample Locations

PCB concentration analysis performed by Groundwater Analytical, Inc., using U.S. Environmental Protection Agency (EPA) Method 8082 (GC/ECD).

Aroclor 1016, 1221, 1232, 1242, 1254, and 1260 also tested. All results below reporting levels, unless noted.

